REMARKS

Status of the Claims

Claims 1 – 31 were previously pending.

No claims have been amended, added, or cancelled.

Claims 1 – 31 are now pending.

Rejection of Claims 1 – 29 Pursuant to 35 U.S.C. §103(a)

The Examiner rejected claims 1 – 29 pursuant to 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,434,713 to Shin *et al.* ("Shin") in view of U.S. Patent No. 6,274,949 to Lioux *et al* ("Lioux"). Applicants traverse the Examiner's rejection, and states that independent claims 1, 7, 15, 22, and 25 are patentable over the Shin and Lioux references.

The cited references do not disclose the elements of claim 1. Shin discloses a method for recognizing and responding to an abnormal signal from an application processor. More specifically, the method is designed to recognize the lack of a "heartbeat" from an application processor and responds appropriately to restart the application. Lioux discloses a back-up power accessory for a computer, where the power accessory responds to an abnormal signal or the failure to receive a signal.

In contrast, claim 1 of the present application discloses "monitoring a state of a main application processor with a management processor." No monitoring of management processor is disclosed in Lioux, which only monitors a power accessory. Further, claim 1 requires that "a change from a suspend-to-RAM state to a Run state" be detected, which is a powering process. Shin and Lioux both are drawn to recognize abnormal or missing processor "heartbeats" – in other words, failure of the processor, and not a power-up. Neither Shin nor Lioux disclose "detecting a change from a suspend-to-RAM state to a Run state". Claim 1 is therefore patentable over these references. Further, as claims 2 – 6 are dependent upon claim 1, these claims are also patentable over the cited references.

The cited references do not disclose the limitations of claim 7. The processes disclosed in Shin and Lioux both await a failure or other abnormal signal, and react appropriately to the abnormal signal. In other words, both Shin and Lioux disclose a

system reactive to a failure. However, claim 7 requires the process to "attempt[] a change from a suspend state to a run state of a main application processor". Neither Shin nor Lioux are drawn to an invention that proactively changes system states, nor do they disclose a method for changing a system from a suspend state to a run state. Claim 7 is therefore patentable over these references. Further, since claims 8 – 14 are dependent upon claim 7, these claims are also patentable over the cited references.

Similarly, the cited references do not disclose the limitations of claim 15. Claim 15 also requires that the system "attempt[ ] a change from a suspend state to a run state of a main application processor." As above, neither Shin nor Lioux disclose a method that proactively changes system states, nor do they disclose a method for changing a system from a suspend state to a run state. Claim 15 is therefore patentable over these references. Further, since claims 16 – 21 are dependent upon claim 15, these claims are also patentable over the cited references.

The cited references also do not disclose the limitations of claim 22. Both Shin and Lioux are directed towards the restart of an already functioning processing system in the event of an abnormal signal or processor failure during regular use. In contrast, claim 22 requires the "determining [of] a state of a main application processor in response to a wakeup signal." Neither reference discloses the monitoring of a system as it "wakes up," or in response to a wake-up signal. As above, neither Shin nor Lioux disclose a system that proactively changes system states – both patents disclose mechanism for responding to abnormal signals. Claim 22 is therefore patentable over these references. Further, since claims 23 and 24 are dependent upon claim 22, these claims are also patentable over the cited references.

The cited references do not disclose the limitations of claim 25. Claim 25 also requires that the system "attempt[ ] a change from a suspend state to a run state of a main application processor." As above, neither Shin nor Lioux disclose a system that proactively changes system states, nor do they disclose a method for changing a system from a suspend state to a run state. Claim 25 is therefore patentable over these references. Further, since claims 26 – 29 are dependent upon claim 25, these claims are also patentable over the cited references.

Rejection of Claim 30 Pursuant to 35 U.S.C. §102(b)

The Examiner has rejected claim 30 pursuant to 35 U.S.C §102(b) as being anticipated by U.S. Patent No. 5,151,855 to Gray *et al* ("Gray"). Applicants traverse the Examiner's rejection. Independent claim 30 is patentable over the Gray reference.

Gray is directed towards a power shutdown for master and slave processors upon the receipt of a shutdown condition for the master processor. Gray discloses the attempt to fully shut down slave processors (Gray, col. 1, ll. 35 – 40, and col. 3, ll. 11 – 13). As disclosed in Gray, these slave processors are instructed to save all current variables, and then fully power down (Gray, col. 1, ll. 34 – 41). They are not placed into a suspend or sleep state. In contrast, claim 30 is directed towards "attempting to place a main application processor in a suspend condition". This suspend condition is a sleeping condition for the processors – while the processor is not active during a suspend condition, the processor is ready to begin work quickly, as opposed to needing to go undergo an full power-up procedure before beginning work. Gray does not disclose a system that allows processors to remain in this suspension mode. Claim 30 is therefore patentable over this reference.

Rejection of Claim 31 Pursuant to 35 U.S.C. §103(a)

The Examiner has rejected claim 31 pursuant to 35 U.S.C §103(a) as being anticipated by Gray. Applicants traverse the Examiner's rejection. Claim 31 is patentable over the Gray reference.

As shown above, Gray is directed towards a power shutdown for master and slave processors upon the receipt of a shutdown condition for the master processor. Gray does not disclose a system that "instruct[s] the main application processor to enter a suspend-to-RAM state". Claim 31 is therefore patentable over this reference.

CONCLUSION

For the foregoing reasons, all of the rejections set forth by the Examiner have been overcome. Applicants therefore believe that the application is therefore in condition for allowance. Favorable reconsideration of the application is respectfully requested. If for any reason, the Examiner is unable to allow the application but

believes that an interview would be helpful to resolve any issues, he is respectfully requested to call the undersigned at (312) 245-5354.

Respectfully submitted,

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